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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,045	08/19/2003	Lothar Thiele	HENK-0055/H5213	5086

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EXAMINER

SERGEANT, RABON A

ART UNIT PAPER NUMBER

1711

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/644,045	Applicant(s) THIELE ET AL.	
	Examiner Rabon Sergeant	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Despite applicants' response, the required copy of the priority document has not been received.

2. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have failed to provide support for the resin being present in amounts greater than about 60 wt %, based on the weight of the polyol mixture; however, applicants' claim encompasses quantities greater than about 60 wt %.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Despite applicants' response, the term, "loadbearing", is considered to be a relative term, since it cannot be determined what loads are encompassed by the language. Accordingly, the position is maintained that the term fails to convey a meaningful limitation.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-7, 9-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4401572 in view of Uchigaki et al. ('077) or Hartmann et al. ('392) or Falkenstein et al. ('064) or Brauer et al. ('112) or Mori et al. ('996) or Heider ('895 or '680).

DE 4401572 discloses two component wood adhesives comprising a polyisocyanate and a polyol mixture comprising an oleochemical polyol that corresponds to that of applicants and 2-7 weight percent of a blend of diols and triols having hydroxyl numbers that correspond to those of applicants. See abstract; page 2, lines 50+; page 3, especially line 53; and page 4. With the exception of applicants' tetra- and penta-functional compounds, the position is taken that the aforementioned blend of diols and triols at the recited weight percent corresponds to applicants' components b) and c).

6. The primary reference is silent regarding the use of applicants' claimed resin component; however, resins corresponding to those claimed were known components for polyurethane adhesives at the time of invention. The prior art is replete with teachings pertaining to the beneficial properties obtained by incorporating such resins into polyurethane adhesives. Uchigaki et al. teach at column 5, lines 34+ that resins (tackifiers) impart high cohesive force at low temperatures and high adhesive strength to polyurethane adhesives. Hartmann et al. teach the incorporation of resins into polyurethane adhesives at column 4, lines 18+. Falkenstein et al. teach at column 7, lines 10-15 that properties such as setting time and adhesiveness may be

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controlled through the addition of natural or synthetic resins to polyurethane adhesives. Brauer et al. disclose adhesives at column 3, line 51 and further disclose the addition of resins to these compositions at column 11, lines 55+. Mori et al. disclose the addition of tackifier resins to polyurethane adhesives at column 3, lines 65 and 66. Heider discloses at column 6, lines 23-42 the use of resins within polyurethane adhesives as tackifiers and further teach that creep resistance is improved by their addition. In light of these teachings and in view of the fact that it has been held that it is *prima facie* obvious to utilize a known component for its known function (*In re Linder*, 173 USPQ 356; *In re Dial et al.*, 140 USPQ 244), the position is taken that it would have been obvious to incorporate resins into the adhesive of DE 4401572, so as to improve the properties of the adhesive, in accordance with the teachings of the prior art.

7. Furthermore, though the primary reference is silent regarding the use of tetra- and/or penta-functional polyols within the disclosed polyol blend, the position is taken that it would have been obvious to substitute such high functional polyols for the triols of the reference, because triols and higher functional polyols were known and conventional crosslinking agents for polyurethane compositions at the time of invention. One of ordinary skill would have reasonably expected that higher functional polyols would function equivalently to the disclosed triols of the reference and would have found it obvious to utilize them in place of the triols.

8. Applicants have argued that the secondary references fail to teach applicants' homogeneous solution or mixture of polyol and resin. In response, the position is taken that it would have been obvious to incorporate the resin component into virtually any component of the composition that is non-reactive with the resin for ease of processing, prior to polymer formation, and the position is further taken that applicants have failed to establish that the resins

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of the secondary references would not form homogeneous compositions once incorporated into the polyol component. Applicants have not established that the formation of a homogeneous solution or mixture is unexpected or that its use is critical to the invention in terms of yielding an unexpected result.

9. An English translation of DE 4401572 has been included with this Office action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
August 21, 2006


RABON SERGENT
PRIMARY EXAMINER